

OREGON TUALATIN VALLEY AMATEUR RADIO CLUB



An ARRL Special Service Club

April 1992

Next Meeting April 8, 1992

From The Presidents Desk

By Alan Churchill, AA7CV

Hello to all and welcome to Spring. This is the time we all start thinking about getting new towers up, cleaning out the shack and maybe giving one last shot at that upgrade before Summer sets in.

There is one other activity that maybe we passed over last winter. That activity is "building" something. From spare parts. From a circuit we dug out of the handbook. Because we wanted to. Because we know how.

The FCC doesn't think so. The FCC is making it official later this year that they don't believe we are the slightest bit interested in what is inside the radios we use. Nor, do they feel, is it important that we know. Effective September 1, 1992 the amateur radio tests for all levels of license class will have no questions on internal radio circuitry. There will be no arcane electronics questions on Ohm's law, DC and AC circuits and vacuum tube amplifiers.

What does this mean? Have we let the lure of super sophistication in our radios lull us into accepting the argument that "It costs too much to build" or "We can't find parts anyway" or "Why would I pay more to get less" or the ever present "I don't have the time to build.". The fact is we have, as a group, accepted these arguments. We have become a very large group of appliance operators.

Now, this is not all bad. Certainly we have become skilled in better utilization of our limited frequency allocations. We have pushed into new modes such as packet, ATV and even telemetry. Spread spectrum is being played with as well as laser light. As operators we are very very good.

But as technicians we are becoming lazy. The lure of fancy gear has pulled us away from the workbench just as surely as a child will select a candy cane over meat and potatoes. Maybe there is a reason we now refer to radio stores as "the candy store".

Well, I have no argument with being good appliance operators. When an emergency comes, I will thank my lucky stars for all this great sophistication, all the preparation done by the ARES nets, all the portability of the new 12 volt gear.

But I am also determined that our knowledge of electronics will stay with us as amateurs. We're only one club but we are going to have a first class builders night program. One with interesting projects, good documentation, and good teachers. We are going to design and build things together that QST will want to do stories on. I can see the headlines now. "Small ham club in Oregon bucks the tide by building their own club station."

Where are all these interested students and teachers coming from? They're right here and if they aren't here yet then, like in the movie, I say "People will come, Ray. People will most definitely come." We all have a lot to gain by understanding what is inside our little black boxes. I say the FCC is wrong. We DO have a desire to understand our hobby better.

If you would like to get in on the ground floor of a very exciting and challenging new project night group, give me a call. Let's prove the FCC wrong on this one.

73, Alan Churchill AA7CV

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Going Nets On 2 Meters

By Bill Roth, N7RYW

As your VHF and UHF contact person, I thought you might like to see a list of the nets I know of on 2 meters and up. Here they are:

145.27	Saturday	9:00 AM to 11:00 AM	Swap meet.
145.27	Daily	5:50 AM and 4:45 PM	Weather net.
145.27	Thursday	7:00 PM	Technical net.
145.27	Thursday	9:00 PM	Packet net.
146.90	Third Wed. of Month	7:00 PM to 7:30PM	OTVARC On The Air.
147.32	Daily	6:05 PM	Traffic handling training net.
147.32	Nightly	7:30 PM	ARES net.
???	Sunday	10:00 PM	Astronomy net.

Upcomming Events

BOARD MEETING:

The next board meeting will be on April 1, 1992, 7PM at Gene Buell's place. The address is 143rd & SW Jenkins. Look for the meeting room or call Gene for directions.

NEXT REGULAR MEETING:

At our next meeting (April 8 at Elks at 7PM) we will learn everything there is to know about electroplating from a local expert. Look elsewhere in this issue for details.

THE ULTIMATE WATER SKI TEST:

You won't believe this but as a part of the Rose Festival, there is a water ski race to see who can ski from underneath the Astoria bridge to underneath the Sellwood bridge in the least amount of time. It's true. The race is scheduled for Saturday, June 13 from 7AM until noon. I know, I know, this is the Sea-Pac weekend but if you can't attend Sea-Pac on that Saturday anyway and want to help out with communication, see Randy Stimpson, KZ7T. He will fill you in on the details.

TUNE-UP NIGHT:

Drop In, Turn On and Tune Up at OTVARC. We have tentively scheduled "Tune Up Night" for the July meeting. This means if you have an old rig that needs a little tender loving care, the regular July meeting is a must for you. Tune-Up Night is when we bring together all our old rigs and all our test gear for a dramatic increase in power output, S/N Ratio and just plain fun.

OTVARC ON THE AIR:

OTVARC On The Air is every third Wednesday of the month from 7 -7:30PM on 6.90. If you missed coming to the meeting in person, tune in.

Health & Welfare

By Al Berg, WB7SIC

We are sorry to announce the passing of two club members.

Jim Oggerino, KA7ODY, succumbed to cancer. He had been a club member for a number of years although not an active one.

Bob Rives, W7WI, also a long time member, passed away from causes related to age.

I hope that we all will take a moment to reflect, in our own way, about these two gentlemen and to also give thought as to what our fellow members and friends mean to us.

Upcoming Ham Test Sessions

By Alan, KO7B

<u>Date</u>	<u>Registration</u>	<u>Doors Close</u>	<u>Location</u>	<u>Contact</u>	<u>Phone</u>
April 12	12:30 P.M.	1:30 P.M.	Portland Adventist Medical Center Educational Center A 10123 S.E. Market	Edith Litvin KA7MIF	642-5803
May 9	9:30 A.M.	10:00 A.M.	Mt. Hood Community College Room 1001 26000 S.E. Stark	Rick Lanz N7WCC	777-1131
June 6	12:30 P.M.	1:00 P.M.	PCC Southeast Center Room B1 2850 S.E. 82nd.	Lea Ball AL7W	777-1032
June 13	Advance Registration Only **	9:00 A.M.	Seaside Moose Lodge 735 Broadway Seaside, Oregon	Randy Cobb WN7W	649-5066

**** Send completed FCC 610, a photocopy of current license (if applicable) and a check for \$5.40 made out to ARRL VEC to: VE Testing, P.O. Box 91051, Portland, Oregon, 97291-0051.**

Novice Classes

Novice classes will begin on March 31 at Cedar Park School, Room A-11. You may register in advance through PCC, or register at the class site on the first night of classes. OTVARC member Tom Durell will be the primary instructor for these classes. The classes will be held from 7 to 9 PM each Tuesday evening through June 13 (or until you pass the Novice exam). Test sessions will be scheduled in conjunction with the classes to allow students an opportunity to qualify for a Novice license. And don't forget that OTVARC provides a scholarship which will reimburse the tuition fee for those who obtain their license as a result of taking the class.

For Sale, Trade, Free or Wanted

WANTED:

The Sherwood School ham class is building a station for permanent use at the school. Jim Yohe has been helping the students with classes and equipment setup and now they need just a few more items to fill out the shack. Items still needed include a coax switch (2 position) and a dummy load (50 ohm). If you have either of these items you would like to donate, call Jim at his home or contact any board member.

WANTED:

A good & reasonably priced 2M mobile rig for packet use. Contact Jim Washer KG7HH at 690-6703.

FOR SALE:

A really good nearly new 11 element 2M beam. Also some good older Heath gear. Contact Ray Deeth K7VDQ at 324-4502.

FOR SALE:

Eico brand scope. The cheap kind but great for experimenting and learning about scopes in general. \$20 or trade for some 6146s. AA7CV Alan 639-5660.

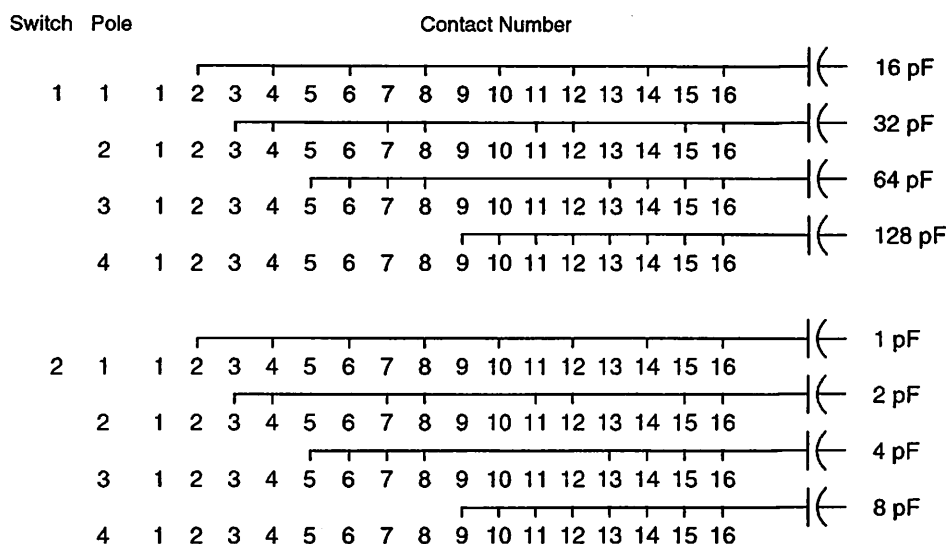
Tuning Antennas - Part 2

By Alan Churchill, AA7CV

OK, we all agree the diagram outlined last month isn't practical. I mean, who can remember the 8 correct switch settings for 155 pf? This month we will explore a better method of switching our 8 capacitors. We will use only 2 rotary switches instead of 8 SPST switches. Switch one will be a "coarse" setting and switch 2 will be "fine tuning". Switch 1 will give us a range of 0 to 255 pf in 16 pf steps. Switch 2 will give us a range from 0 to 15 pf in 1 pf steps.

The needed 16 position, 4 wafer (pole) switches are available through Allied Electronics but before you order them (\$31 ea) you might want to check your junkbox. If you can clean up your junkbox each month and save \$62 each time, it will only take 100 months to save enough for a new ICOM 781. That's the miracle of cleanliness.

Following is the wiring diagram for the 2 switches. They are both wired identically.



Next month we will explore the possibility of using relays or even transistors to switch the capacitors in and out. By now, you can see that we are getting closer to a remotely tuned all solid state antenna tuner. See you next month. Thanks to all of you who called me with ideas. This could develop into something really fun.

YAJC (Yet Another J-pole Correction)

What? Another correction to the JPOLE? Live and learn guys and gals. Antennas are funny things. We all know they are resonant at a certain frequency and none other but sometimes there are many reasons why that resonant frequency is what it is.

Here is what we learned. On the JPOLE, where you have the coax joined to the twinlead makes a BIG difference. Just a fraction of an inch can put you way off the band. So, the trick to building the JPOLE and getting it to resonate is to measure VERY CAREFULLY 1-1/4" up from the bottom of the twinlead and join your coax there. If you are even 1/4" higher or lower than 1-1/4", the length of the ground stub and the length of the entire antenna will be dramatically changed.

Also, we found in building about 15 of these, that putting them in 1/2" PVC, taping them to a wooden dowel or even having them close to any other object affects your SWR.

This means when you are trimming your JPOLE you should have it close to the state it will be in when finally mounted. Good luck. Build one tonight!

1992 OTVARC MEMBER PROFILE

Name _____ Call _____ Class _____

Address _____ Member # _____

City, State, Zip _____ Home Phone _____

Spouse Name _____ Work Phone _____

Occupation _____ ARRL Member? Yes___ No___

Former Calls _____ Omit from Directory? Yes___ No___

Computer Owned _____ Years Licensed _____

Station Consists of _____

Other Interests _____

How did you find out about OTVARC _____

Comments _____

Circle the interests you have or committees you are interested in.

Interests

- 1 CW
- 2 SSB
- 3 FM
- 4 Packet
- 5 ATV

- 11 HF
- 12 VHF
- 13 UHF
- 14 MARS

- 21 QRP
- 22 Ragchew
- 23 DX
- 24 Contest
- 25 Traffic
- 26 Field Day
- 27 Building

Subscribe To:

- 41 QST
- 42 CQ
- 43 73
- 44 NCJ
- 45 W5YI

Committees

- 100 Bingo
- 105 Contesting
- 110 DX News
- 115 Equipment Evaluation
- 120 Emergency Services
- 125 Field Day
- 130 Health & Welfare
- 135 Membership Services
- 140 Newsletter
- 145 Project Night
- 150 Public Relations
- 155 Public Service
- 160 Repeater
- 165 RFI/TVI
- 170 Satellites
- 175 Scholarship
- 180 Sea-Pac
- 185 Social Events
- 190 Technical
- 195 Testing
- 200 Training
- 205 Travelers
- 210 VHF/UHF

Membership Class Desired: Full___ Assoc___ Family___ Life___

Paid Date _____ Amt _____ Check # _____

Emergency Services

Tim Taylor, N7UCA

As Randy mentioned in his article last month, we are presently forming a group of OTVARC members who are interested in emergency services.

Our goal is to develop a resource group of amateur radio operators who are trained in emergency communication s procedures and would be available to provide communication in the event of a local or regional emergency. I would like to invite all OTVARC members and especially newly licensed amateurs, to become a part of this effort.

For those of you not familiar with emergency net procedures, the amount of time necessary for training is quite minimal, and we are planning some basic activities to help you get up to speed. For starters, I would recommend checking into one of the ARES nets such as the District 1 Net which is every evening at 7:30 P.M. local on 147.32 Mhz or the Washington County ARES Net which is every Tuesday Night (except 2nd Tuesday) at 7:00 P.M. local on the 147.04 repeater.

Another excellent activity would be to get involved in some of the public service activities that the club supports. See Randy Stimson, KZ7T, at a club meeting, or give him a call and he will get you involved.

I'd like to take the opportunity to thank everyone who filled out the OTVARC Emergency Services Profile at the last meeting. Twenty-six were returned to me at the meeting, and several more since.

For those members who have not yet had a chance to fill one out, you will find one in this copy of the newsletter. Please take a minute or two to fill one out and either mail it to me or hand it to me at the next meeting.

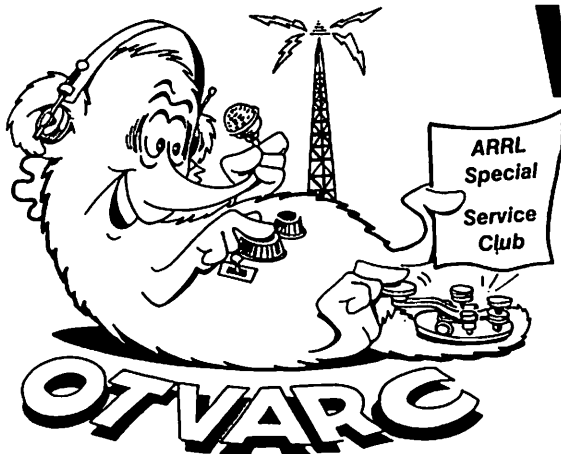
My mailing address is:
5561 S.W. Seymour Street
Portland, Oregon 97221

Program for April

Coming up this month is a very interesting talk about electroplating. We will have a engineer from the Chemithon corporation talking about the environmental challenges of his industry.

Electroplating is used in most of the equipment that we use every day. Come on in and find out about one of the least understood but most important industries.

**Remember: The OTVARC Club 2 Meter
Repeater is on 146.90 (-600)**



WB7SIC

N7TRW

Al & Mary Berg
2256 S.E. Oak Crest Dr.
Hillsboro, Oregon 97123
USA

Washington County

10-X #22958
HHH #499



RADIO:	DATE:	UTC:	MHz:	MODE:	UR RST:	QSL:
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Oregon Tualatin Valley Amateur Radio Club

A WX9X QSL

CLUB QSL CARDS

Several years ago we made club cards available and ordered quite a few thousand. The card you see has been changed slightly. The tower has been moved, the card stock is glossy and the red print is darker. The OTVARC little guy, our club name and initials are red. All else is in black. I have paid for the red artwork and changes so you benefit! All you need to do is fill out the form and return to me. The cost??? It depends on how many we order as a group. Large quantity orders reduce the price quite a bit. As it is, if I order 500 it is \$32.95 or \$42.95 for one thousand. As a group, the cost would be much lower. How much lower? Turn in your orders and I will call for a bid, let you know and we will go from there. Fair enough? By the way, the callsign size on our cards was by request. Mary doesn't work HF. Don't wait! If you are interested, fill out the form and get it to me. NO obligation till we get a bid price. Al WB7SIC 640-5456 or at a meeting.

CALL LETTER IMPRINT TYPESTYLE (Select one typestyle for your call sign)

A - ☐ **WX9X** C - ☐ **WX9X** E - ☐ **WX9X**
B - ☐ **WX9X** D - ☐ **WX9X** F - ☐ **WX9X**

IMPRINT INFORMATION (Please Print or Type Clearly, Especially U's & V's)

Name _____ Call _____

Address _____

City _____ State _____ Zip _____

County _____ Grid _____

Other: awards, logos, ex-calls, etc: _____

Do you want USA on your address? ☐ YES ☐ NO

Do you want ARRL Logo on the QSL? ☐ YES ☐ NO

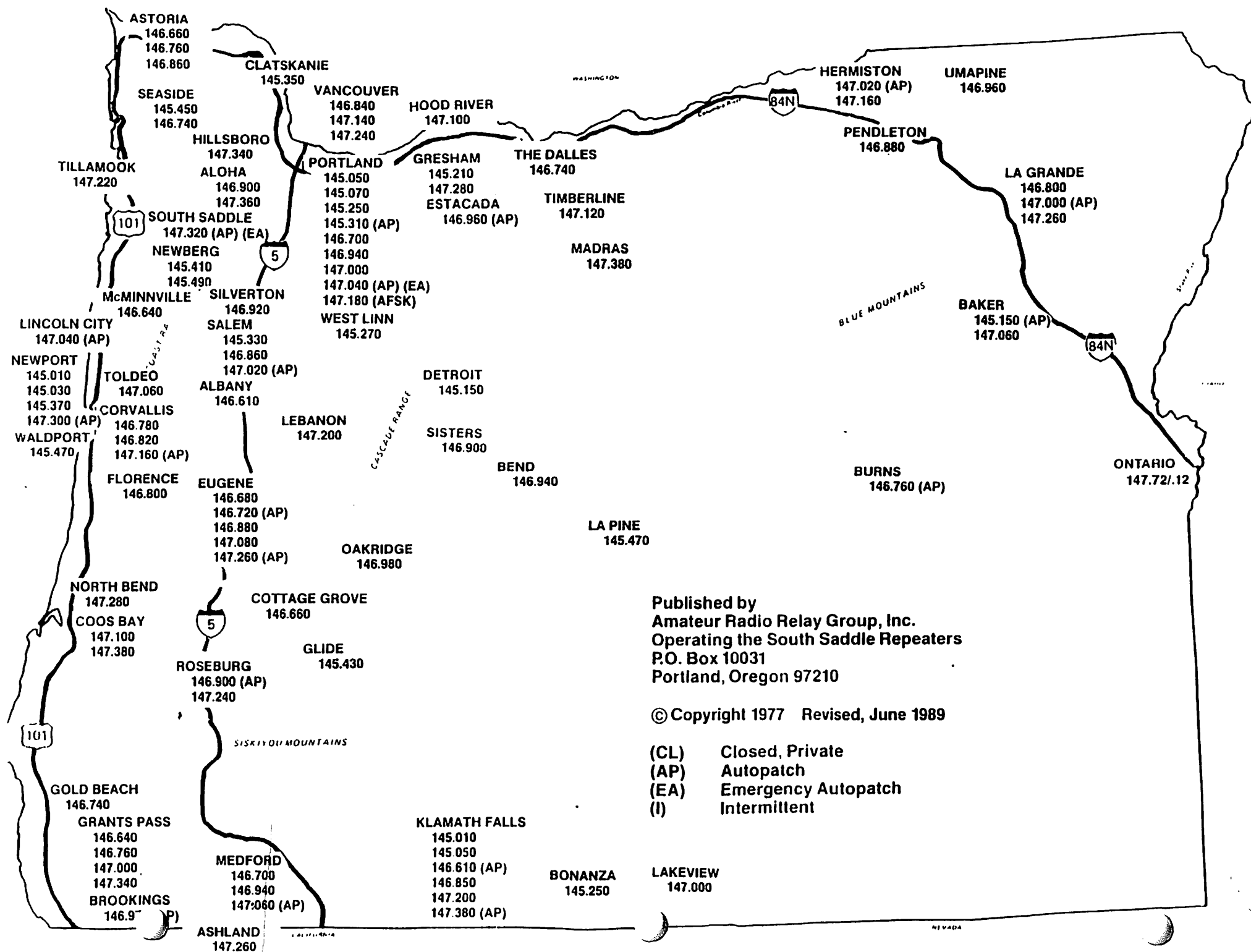
Your phone number (will not appear on the QSL)

day () _____ evening () _____

Special

Instructions

QUANTITY: (Minimum Order is 500) ☐ 500 ☐ 1,000 ☐ _____



OTVARC EMERGENCY SERVICES PROFILE

Name _____ Call _____ License Class _____
Address _____ City _____ State _____ Zip _____
Home Phone _____ Work Phone _____ Cellular, Pager, etc. _____

OPERATING CAPABILITIES

BAND	MODES					EQUIPMENT TYPES			
	CW	AM	FM	SSB	PACKET	BASE	MOBILE	H.T.	MaxPwr.
HF	_____	_____	_____	_____	_____	_____	_____	_____	_____
2M	_____	_____	_____	_____	_____	_____	_____	_____	_____
70cm	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Are you currently an ARES member? Yes _____ No _____

Are you currently a member of a RACES group? Yes _____ No _____ If yes, which group _____

Would you be willing to participate in emergency services training exercises? Yes _____ No _____

In the event of a widespread power outage, what are your base station emergency backup capabilities?
Battery _____ (# of hours _____) Generator _____

If an emergency arose, could you be released from work quickly? Yes _____ No _____

If an emergency arose, how soon would you be able to respond? From home _____ From work _____

Do you have portable packet capability? Yes _____ No _____

Please include any additional comments or suggestions:

D EETH & ASSOCIATES

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Communications Servicing

9935 S.W. Johnson St.
Tigard, OR. 97223

Joe Borsch W7PNS

(503) 684-5201

Upcoming Events

March 31	Project Night
April 1	OTVARC Board Meeting
April 8	OTVARC General Meeting Beaverton Elks Club
April 12	Upgrade Test Session Portland Adventist Med. Center
April 15	OTVARC On The Air 146.90 Mhz, 7:00 P.M.
April 28	Project Night
May 6	OTVARC Board Meeting
May 9	Upgrade Test Session Mt Hood Comm. College
May 13	OTVARC General Meeting Beaverton Elks Club
May 20	OTVARC On The Air 146.90 Mhz, 7:00 P.M.
May 26	Project Night
June 6	Upgrade Test Session PCC Southeast Center
June 12, 13, 14	Sea-Pac Ham Convention Seaside, Oregon
September 29	Project Night
October 27	Project Night
November 24	Project Night